

From owner-qrp-1@netcom.com Thu Jan 26 15:55:50 1995
Message-Id: <9501261629.AA28882@garnet.inel.gov>
Date: Thu, 26 Jan 1995 09:30:55 -0700
From: LVE1@inel.gov (Larry East)
Subject: 100 kHz crystals

Looking through the latest DigiKey catalog, I noticed 100 kHz crystals are available in the tiny cylinder style -- the size used in digital watches, etc.

The following specs are shown:

- Frequency: 100.000 kHz (no tolerance specified)
- Size: 6.2 mm long by 2.0 mm diameter (!) with 4 mm lead length
- Operating temperature range: -10 to +60 deg C (no temp coefficient given)
- Maximum drive level: 1 microwatt (pretty fragile...)
- Capacitance: 11 pf +/- 100 ppm
- Series resistance: 35K to 15K

And cheap too: \$1.44 in single quantities!

Looks like a very compact frequency calibrator for building inside QRP rigs could be made using one of these; I've ordered a couple to play with, so stay tuned. I believe that putting one of these critters in the gate circuit of a junction FET (MF102, etc.) would not exceed the maximum drive level -- any comments on this? Maybe one would have to go to a CMOS FET? I'm assuming a drain voltage of 5V or less.

Other crystals of the same general configuration are available in several discrete frequencies from 20 kHz to 60 kHz. Has anyone had any experience using this type of crystal?

"Any opinions expressed herein are my own and probably do
not agree with those of my employer, the U.S. Government
or my spouse"

--... ..--

Larry V. East (W1HUE)

Idaho Falls, ID

e-mail: LVE1@inel.gov

Packet: W1HUE@WT7B.ID.U.S.A.NOAM

work: (208) 533-4005 home: (208) 529-2162

From owner-qrp-1@netcom.com Thu Jan 26 02:58:23 1995

>From: brian.carling@netcom.com

Yes Chuck, I've noticed the same here. Even with my "QERP" station using a bent 40m dipole up 6 feet, I've worked several Europeans on 17 meters around 1300 UTC, and this morning I got FS5/F2PI on 10 MHz at 1225 UTC.

72.999674 de AF4K brian.carling@acenet.com

— — —

From owner-qrp-l@netcom.com Fri Jan 27 00:39:08 1995
Message-Id: <199501262223.0AA28746@netcomsv.netcom.com>
Date: 26 Jan 1995 13:31:10 -0800
From: "Byon Garrabrant" <byon@quicksilver.com>
Subject: A kit for a new QRP'er

I am interested in starting in QRP. Where can I find a list of inexpensive kits which would be good for a first time QRP kit builder? Any recommendation from those more experienced than I? I was thinking of a mono band transceiver for CW or even SSB.

Thanks

Byon Garrabrant KD6BCH byon@quicksilver.com

From owner-qrp-1@netcom.com Thu Jan 26 14:06:49 1995
Message-Id: <MAILQUEUE-101.950126094518.320@rics1.cba.uh.edu>
From: "Dave Jenkins" <DJENKINS@rics1.cba.uh.edu>

Date: 26 Jan 95 09:45:18 CST
Subject: AA3JV - Are you there?

Craig (I think): Need your address and your qth of this morning's
qrp qso.

Tnx es 73,

Dave Jenkins
KC5JRR

From owner-qrp-1@netcom.com Thu Jan 26 12:25:29 1995
Date: Thu, 26 Jan 1995 07:50:00 -0500
From: "david (d.) burniston" <davidgb@bnr.ca>
Message-Id: <"25849 Thu Jan 26 07:50:26 1995"@bnr.ca>
Subject: Any Unbuilt Sierra Kits?

Hi...

I've finished my SW30, NORCAL 40, TEN TEK kits and now I'm looking for
another challenge.

Anyone out there who hasn't built their Sierra kit and doesn't figure
they'll get around to it? If so let me know...

... Dave

```
=====
Dave Burniston,          Bell Northern Research  Ottawa, ON Canada
VE3LFO                  ph.(613) 765-3579
NORCAL 434              *** All opinions are strictly my own. ***
=====
```

From owner-qrp-1@netcom.com Thu Jan 26 17:26:03 1995
Date: Thu, 26 Jan 95 13:15:37 -0600
From: adams@chuck.dallas.sgi.com (chuck adams)
Message-Id: <9501261915.AA17344@chuck.dallas.sgi.com>
Subject: Classic Mod

Gang,

Let me repost this with proper heading, so that
it will become part of the permanent record. :-)

This mod of the OHR Classic rig. It fixes a problem
with a possible key click on transmit.

When I first posted this I said Explorer and I just didn't have brain in gear, as usual. If you looked at the Explorer, you certainly would not find these parts. :-)

Again, sorry for the snafu.

```
> C350 and C349 - remove both
> R336 which is 1K - change to 470 ohms
> solder 10uF electrolytic to bottom of board
>   between emitter and collector of Q308 with
>   + lead of cap to emitter of Q308 and
>   - lead of cap to collector of Q308.
>
> Careful on underside to not short anything.
>
> This mod will eliminate a key click on the air.
>
```

Chuck Adams K5FO CP-60 adams@sgi.com

From owner-qrp-l@netcom.com Thu Jan 26 12:30:35 1995
Message-Id: <9501261514.AA23528@esds01.es.dupont.com>
Date: Thu, 26 Jan 95 10:14:22 EST
From: "Stephen M. Shearer, 695-7719" <shearer@eplram.dnet.dupont.com>
Subject: Re: Curtis Chip PostScript

```
>> Try ftp sgi.sgi.com for anonymous ftp. In directory
>> pub there is a 8044.ps file. It's over 1MB, so copy
>> across and then print to your favorite PostScript
>> printer. When you photocopy give credit to Curtis
>> Electro Devices.
>> FYI
>>
>> Chuck Adams K5FO CP-60 adams@sgi.com
>>
>
>Thanks Chuck!! BTW, your file is on ftp.sgi.com not
>sgi.sgi.com. That might confuse some people.
>
>72 de WB6TPU, Ray
>raymonda@radium.eng.sun.com
```

For those with MOSAIC, use -- ftp://ftp.sgi.com/pub/

Thanks, also...

73, Steve WB3LGC

From owner-qrp-l@netcom.com Fri Jan 27 00:36:54 1995
Date: Thu, 26 Jan 95 17:12:56 -0500
From: djwang@ginger.biophys.upenn.edu (DJ Wang)
Message-Id: <9501262212.AA04626@ginger.biophys.upenn.edu>
Subject: Re: Curtis Chip PostScript

Has any one FTPed the 8044.ps file yet? The XPSVIEW on my
SiliconGraphics does not recognized the file.

Thanks and 72

D.J., N2YKP

From owner-qrp-l@netcom.com Thu Jan 26 11:02:09 1995
From: ab4el@cybernetics.net (Stephen Modena)
Message-Id: <9501261236.AA29208@cybernetics.net>
Subject: Dual Fox Hunt Check Log
Date: Thu, 26 Jan 1995 07:36:52 -0500 (EST)

Report on Wednesday night activities, Jan 25th EST.

[I'll had some sleep and am not as cranky as before (you know what I
mean--if you've been reading).]

I think we are coming into an interesting part of the Winter for
propagation on both 40 and 75 M bands. I'm getting the itch to
start regular QRP operation on the 3905 CC on 3.9035 and the
GERITOL NET on 3.768 to see if I can work HI and AK and complete that
ARRL WAS QRP award.

We had both the CW and SSB QRP FOX HUNTS running simultaneously.

Never did hear KF8EE. Wow, am I ever going to work him? The band
seems to go really long and/or very directional.

02:28 7.110.9 MHz KC5JRR 539/s 539/r Dave in Kenney, TX 5 W

Dave was in among a number of non-Novice format calls in that stretch.

Popped over to SSB every now and then. Wow! Some of the foreign BC
lobes were really strong. The clear hole normally at 7.228 just wasn't
there. Heard KB2AR in QSO with someone. Knew he was a KW Joe because
I could hear his blower motor on the linear. A bit later I heard him
calling CQ...gave a shout...but he came back to WB8ZJL (the Fox) after

a couple of exchanges to get the callsign phonetics. I could not hear the WB8ZJL side of QSO. Appears that after KB2AR got the callsign correct and reports were exchanged, Paul turned up to 100 W as a courtesy...still couldn't hear him.

Tuned around a bit:

02:49 7.212.5 K5KVH 55/s 55/r He was calling for Fox.

Speed Limit does give the correct idea of his signal. He seemed to have parked on a heterodyne (which he probably couldn't hear where he is: he sounded like 55 on top of a 59++ heterodyne). Good signal!

Went back to CW in the new segment.

02:53 7.041.6 KC5JRR 599/s 599/r We did a simple over of reports.
He was strong! Nice sounding sig.

I heard WA4ZID (449) work KC5JRR.

Went to 75 M for the SSB FOX.

03:03 3.785 WB8E/qr0 59 in MI

03:04 3.785 WB8ZJL/qrP 57/s 55/r Paul 5 W 40 miles N of Detroit, MI
Good! I can hear the FOX.

There was QSB...and sometimes Paul was S9+20...excellent quality signal. After I worked Paul, he worked several people.

KC1FB/qrp, you were 57 up there in CT...heard you tell Paul that you heard me at 56. Thank you.

N1QPR/qrp, I heard you call Paul...you were 33 and fading fast with a rasping sound...probably a propagation artifact.

W3PM/qrp, heard you Gene in Huntsville, AL running 5 W...right at that moment both you and Paul were equally strong here...excellent voice quality, like Paul.

KG8KZ/qr0, seemingly nearby Detroit in Paul's area, I heard you at 55 at 100 W...and I guess you heard me butt in also. :^)

KE4PC/qrp, I heard you work the Fox...33 here. Nice to hear you again.

Then something "different" happened. Paul called QRZ and two strong voices rang out to call him...

AD4ZT/qr0 running 100 W
AD4ZE/qrp Warren a few miles from me in Cary, NC

If you say the phonetics for those two calls...which were competing for the ear of the Fox simultaneously...say the phonetics: they differ by one phoneme! :^)

The QR0 station won out....and when the Fox finished with him, AD4ZE called again and Paul heard him. Usually Warren is light copy here, but this time he was really strong...and distorted...loss of highs. I think I was hearing him completely by sky-wave from just 4 miles away...59++.

I have to say that running on 3.785, Paul was sandwiched between a strong digital signal covering the Portugese Beacon on 3.783.5 and a gaggle of East Coast Kilowatts working YU5XTC, who was parked on 3.787.5

After Paul moved up band to the new segment, I didn't hear him right away. It was crowded! Finally I found him on 3.900.9, where I hadn't thought to look since "good ol' boys" are usually sitting there.

At the end of the hour I was QS0ing WB8ZJL/qrp/fox...and the QSB was a marvel...Paul would fade to 33 and come roaring back up to S9+20! Paul, I'd like to know what your antenna is.

To close out, I looked back on 40 CW.

03:49 7.042 MHz NA5K 599/s 579/r Booming signal, Smitty. He hadn't heard the fox...neither had I. Oh, well.

--

73/Steve/AB4EL ab4el@Cybernetics.NET in Raleigh, NC 35.81245N, 78.65849W

From owner-qrp-l@netcom.com Thu Jan 26 12:20:23 1995
Message-Id: <199501261359.AA08588@marcel.gamekeeper.bellcore.com>
Subject: FOX? What FOX? I couldn't hear any stinking FOX!
Date: Thu, 26 Jan 95 09:03:54 EST
From: "Luis R. Anaya" <papo@gamekeeper.bellcore.com>

Well gang, the subject says it all. I sat down for 1/2 an hour from 10-10:30 and I couldn't hear any FOX over in New Jersey. Some people talking over in a net and somebody in Pennsylvania. I actually did not have time because I had to finish a program and my YL wanted to go to bed early. Oh Well. Maybe next week.

73 ES 72

--

Luis Roberto Anaya-Rivera papo@donuts0.bellcore.com
A True PL/1 Hacker papo@briscas.gamekeeper.bellcore.com
Bellcore, NJ Ham: N2ZXE+

From owner-qrp-1@netcom.com Thu Jan 26 12:54:24 1995
Date: Thu, 26 Jan 95 08:30:46 -0600
From: adams@chuck.dallas.sgi.com (chuck adams)
Message-Id: <9501261430.AA16216@chuck.dallas.sgi.com>
Subject: ftp site

Another error, seems that external to SGI the system is known
as ftp.sgi.com, but I think most people found that out ahead
of time. The names of systems externally changed a while back
and I missed it.

The Curtis Application Notes on the 8044ABM in postscript form,
8044.ps, has all the schematics, etc. The only thing missing was
the photo of John C. Curtis.

Does anyone know if the PO Box in Mt View CA is still good? We
know that phone number is not.

dit dit

Chuck Adams K5FO CP-60 adams@sgi.com

From owner-qrp-1@netcom.com Thu Jan 26 18:54:53 1995
From: weinfurtner@ouvaxa.cats.ohiou.edu
Date: Thu, 26 Jan 1995 16:11:11 EST
Message-Id: <0098B0BF.E6C482A0.101@ouvaxa.cats.ohiou.edu>
Subject: HR 2510 to qrp mods?

Ohio University Electronic Communication

Date: 26-Jan-1995 04:05pm EST

To: Remote Addressee (_MX%"qrp-1@netcom.com")

From: Gregory Weinfurtner
WEINFURTNER

Dept: Modern Languages
Tel No: 614-593-2747

Subject: HR 2510 to qrp mods?

Hi,

Anyone have any info on lowering the power of the 25 watt HR 2510 10 meter all-mode rigs? I would like to use it as a QRP rig, but also as a transverter driver/receiver for 6 and/or 2. Wasn't there an article in QST on this? Thot I'd read it somewhere... Oh, haven't built the transverters yet...that's project number 6,857 for this winter...hee hee!

73 de

```
*****
*                               Greg Weinfurtner AEE BSS *
*      NN      N  SSSSSSS  8888888  0000000  Electronic Design Splst *
*      N N      N  S      8      8  0      0  Ohio University Athens *
*      N N      N  SSSSSSS  8888888  0      0  GO BOBCATS! *
*      N  N N      S  8      8  0      0 *
*      N      NN  SSSSSSS  8888888  0000000  "When in trouble, When in *
*                               doubt, Run in circles, *
*                               Amateur Radio      Scream and shout." *
*****
```

Received: 26-Jan-1995 04:11pm

From owner-qrp-1@netcom.com Thu Jan 26 22:16:31 1995
Date: Thu, 26 Jan 1995 18:16:36 -0800
From: faunt@netcom.com (Doug Faunt N6TQS 510-655-8604)
Message-Id: <199501270216.SAA08651@netcom14.netcom.com>
Subject: Re: HR 2510 to qrp mods?

There's a compendium of mods in the Proceedings of the 20th Eastern VHF/UHF Conference that addresses this, as well as an article in the January 1995 QST on this.

73, doug

From owner-qrp-1@netcom.com Thu Jan 26 12:42:36 1995
Message-Id: <9501261604.AA28571@garnet.inel.gov>
Date: Thu, 26 Jan 1995 09:05:22 -0700
From: LVE1@inel.gov (Larry East)
Subject: Interesting new IC

I recently received a new waveform generator IC from MAXIM for evaluation

that looks quite interesting -- it is the MAX038. Some features are:

- 0.1Hz to 20MHz frequency range
- Triangle, sawtooth sine square and Pulse waveform output (NOT all at the same time! - selectable)
- Independent frequency and duty cycle adjustments
- 350 to 1 frequency sweep range (can be FM modulated!)
- Duty cycle adjustable from 15% to 85%
- Low output buffer impedance: 0.1 Ohm
- Low distortion sine wave output: 0.75% (not sure what that means...)
- Temperature drift spec of 200ppm/deg C (not too shabby...)

Looks like it could be the basis for a hellofa compact VFO -- remember, you heard it here first! (Actually, I think some else on the list asked about this critter before.) However, I have no idea what this little gem costs...

An application note that came with it showed a schematic of a frequency synthesizer using this chip referenced to a crystal oscillator, a 12 bit DAC and phase detector that has a frequency range of 8 kHz to 16.383 MHz in 1 kHz steps (!) -- but frequency selection is via toggle switches. One could use rotary switches, restrict the frequency range a bit, use, say, 100 Hz increments (or maybe "rubber" a mixer injection frequency) and viola! -- a frequency synthesized VFO!

(Better get to work, Chuck!)

72 --

"Any opinions expressed herein are my own and probably do
not agree with those of my employer, the U.S. Government
or my spouse"

--... ..--

Larry V. East (W1HUE)

Idaho Falls, ID

e-mail: LVE1@inel.gov

Packet: W1HUE@WT7B.ID.USA.NOAM

work: (208) 533-4005 home: (208) 529-2162

From owner-qrp-l@netcom.com Fri Jan 27 00:40:54 1995

Date: Thu, 26 Jan 1995 13:49:11 -0800

From: myers@bigboy73.West.Sun.COM (Dana Myers)

Message-Id: <9501262149.AA00548@td3.West.Sun.COM>

Subject: Re: Interesting new IC

> I recently received a new waveform generator IC from MAXIM for evaluation
> that looks quite interesting -- it is the MAX038. Some features are:

>
> - 0.1Hz to 20MHz frequency range
> - Triangle, sawtooth sine square and Pulse waveform output (NOT all at
> the same time! - selectable)
> - Independent frequency and duty cycle adjustments
> - 350 to 1 frequency sweep range (can be FM modulated!)
> - Duty cycle adjustable from 15% to 85%
> - Low output buffer impedance: 0.1 Ohm
> - Low distortion sine wave output: 0.75% (not sure what that means...)
> - Temperature drift spec of 200ppm/deg C (not too shabby...)
>
> Looks like it could be the basis for a hellofa compact VFO -- remember, you
> heard it here first! (Actually, I think some else on the list asked about
> this critter before.) However, I have no idea what this little gem costs...

Chips of this type often have fairly poor phase noise characteristics.
Does the Maxim data sheet give any figures?

Dana
Dana.Myers@West.Sun.Com
P.S. I operate VHF FM QRP (+25dBm)

From owner-qrp-l@netcom.com Thu Jan 26 09:01:47 1995
Date: Thu, 26 Jan 1995 10:00:07 GMT
From: Goran Hosinsky <hosinsky@royac4.royac.iac.es>
Message-Id: <9501261000.AA06034@royac4.royac.iac.es>
Subject: Internet

Hi!
I am using the telephone line with a modem to log in via my office. I have
a PC there connected to the network and use a terminal program I found at
SIMTEL120. The office computer even rings me up if I want to save on phone
bills.
73 Goran ea8yu

From owner-qrp-l@netcom.com Thu Jan 26 21:36:00 1995
Date: 26 Jan 95 18:03:44 EST
From: Craig LaBarge <74740.3166@compuserve.com>
Subject: Keyer Info?
Message-Id: <950126230343_74740.3166_EHB273-3@CompuServe.COM>

Does anyone know off-hand what mode of iambic operation (e.g., A or B) the
following keyers use?

MFJ optional keyer for the 90XX QRP rigs
Super CMOS II keyer

Any info would be appreciated.

I'm brand new to electronic keying and, from what I hear, IAMBIC B seems to be the more common mode these days (although, to me, IAMBIC A seems to be more intuitive). Since I just started learning to use a keyer this week, I haven't worked up to using iambic techniques yet. So, I haven't committed to either mode yet. I set up my Curtis keyer kit from Jim Cates for IAMBIC B and I find the timing to be tricky to master. This is gonna take some time! :-)

73, Craig WB3GCK

From owner-qrp-l@netcom.com Thu Jan 26 21:20:00 1995
From: GFriedla@griprod2.gri.org
Date: 26 Jan 95 16:48:00 EST
Subject: Kits
Message-Id: <2017282F01252C79@-SMF->

I'd like to get information about the Norcal kits and SW(?) kits. Can someone point me in the right direction?

73, WD9HDM
Gary Friedlander (gfriedla@gri.org)

From owner-qrp-l@netcom.com Thu Jan 26 21:33:35 1995
Date: 26 Jan 95 18:03:37 EST
From: Craig LaBarge <74740.3166@compuserve.com>
Subject: Logos Online??
Message-Id: <950126230336_74740.3166_EHB273-2@CompuServe.COM>

Howdy:

This has probably been asked before... Is there anywhere on the Internet (or elsewhere) where I can find a copy of the QRP ARCI logo in softcopy (e.g., postscript, etc.)?

73, Craig WB3GCK

From owner-qrp-l@netcom.com Thu Jan 26 19:47:14 1995
Date: Thu, 26 Jan 1995 14:43:27 +0800
From: Raymond.Anderson@Eng.Sun.COM (Ray Anderson)
Message-Id: <9501262243.AA05328@radium.Eng.Sun.COM>
Subject: Need Builders/Testers for Inet Rig broadband Quadrature Generator

We are in need of a few homebrewers who could construct a newly designed broadband digital quadrature generator for use with

the R2/T2 phasing rig.

Last fall there was a lot of traffic flying around the list as we were proposing different schemes and circuits. Glen VE3DNL has put in a lot of time on the bench and now has a prototype which we THINK will do the job.

We now need a few volunteers to see if the circuit can be replicated (dead-bug style for now). We also need someone to try the assembly out on their R2/T2 to see if it really does what we think it does. The circuit consists of 2 ECL chips, 1 opamp, 7 capacitors, 2 pots, and about 29 resistors. You need to provide your own VFO at this point in time. The VFO runs at 2X the output frequency. (for 40 meters you need a 14MHz oscillator)

The postscript schematic is posted on the ftp site ftp.netcom.com in the /pub/ra/rander/qrp directory as eclphs.ps . If you would like to see the schematic but can't get into the ftp site for some reason, let me know and I can e-mail it to you.

Anyone wanting to construct one of these devices to prove out the concept please e-mail me at : raymonda@radium.eng.sun.com.

Thanks in advance for any and all assistance. Troubleshooting help will be available via e-mail from VE3DNL and myself.

72 de Ray WB6TPU
raymonda@radium.eng.sun.com

From owner-qrp-1@netcom.com Thu Jan 26 16:56:35 1995
From: blifter@ccd.harris.com (Bruce Lifter)
Message-Id: <9501261601.AA95344@morsg>
Subject: NORCAL Meeting, Autek RF-1, Sierra
Date: Thu, 26 Jan 1995 11:01:31 -0500 (EST)

I haven't posted here in a while so this one rambles a bit, so here goes. :)

Is the NORCAL QRP club meeting worth spending a couple of extra days in Northern California? I will be there near the first Sunday of February and I am trying to decide if I should get there a couple of days early to make the meeting. How about the Livermore swap meet?

I assume the next NORCAL meeting will be on Sunday February 5th. Can someone confirm this for me? (direct email to blifter@ccd.harris.com)

Based on nothing but good reviews, I just ordered a RF-1 Analyst from Autek.

They say it will be sent out tomorrow. I guess the 5-6 week backlog we heard about is over. I will let y'all know if this is not the case.

My Sierra is up and running on 20 meters. Everything went OK except that one of the voltages I measured did not match the table provided. (I forget which, One of the legs of one of the 3 legged creatures in the VFO had a -1.6 volts on it.) It does not seem to affect the operation of the rig. On to the next band module...

73, Bruce AD4TG

--

Bruce Lifter
Harris Corporation
Controls Division
Melbourne, Florida

MS: R5-202
email: blifter@ccd.harris.com

From owner-qrp-l@netcom.com Thu Jan 26 10:46:36 1995
From: PDouglas12@aol.com
Date: Thu, 26 Jan 1995 09:35:41 -0500
Message-Id: <950126093540_7466132@aol.com>
Subject: NW80/20 errata fr bldrs (long)

Apologies to non-builders of the Dan's Small Parts NW80/20 transceiver kit for length of this, but I had too many requests for errata sheet to keep track of individual emails. (Did try to warn in subj line.)

This is from my Northwest 40 (NW80/20 for 40m) purchased Jan 95:

1. Jumper #1 not describe anywhere in step-by-step, and easily missed, is mandatory, or IF filter won't work. (J2 is redundant, and optional. All other Jumpers are mandatory.)
2. C2 and C3 are wrong on silk screening--follow schematic and pictorial.
3. Pages 10 and 12 are exactly the same except they have different page numbers. You are not having deja vu, and there is no other page missing instead.
4. Fifth instruction on P14 starts out, "Cut two 6" lengths..." If followed, will result in a 12v dead short. The second wire should be a black wire connected to the (-) side of the power connector and the ground on the pc board.
5. Active filter (separate small pc bd) was printed in mirror, so must be built on trace side as if it were a surface mount board to avoid confusion and backwards connections, especially the IC.
6. No instructions on adjustment of C61 in XMTR output to RCVR. What does it do?
7. P14 #5 "adjust C55" should read "C54"
8. P16 2nd para. 1/2 down, "It may be nec. to adjust C14" should read "R14". Same error in 2nd to last para. same page.

Some of above are trivial, some quite serious. Make sure you also have the

errata sheet from Dan's called "NW80/20 Addendum" as it is essential. All this may not apply to the latest PC board, which is just about to come out, I am told. The later board is distinguished by being solder masked. Mine was not.

Builders, please give me other errata I may have missed as I promised Dan's to send them on for benefit of all. WJ2V Preston

From owner-qrp-1@netcom.com Thu Jan 26 10:17:07 1995
Message-Id: <199501261107.DAA20463@mail.netcom.com>
From: Charlos Potma <Charlos.Potma@rivm.nl>
Subject: One of the last Sierra's is alive and well.
Date: Thu, 26 Jan 95 11:57:50 GMT

hello all,

I completed construction and alignment of the NORCAL Sierra yesterday. I deviated from the instructions in so far that I first mounted all resistors, capacitors and coils. It took two evenings to wind all torroids for the set and one band module. I used sockets for all the IC's. I then mounted transistors and IC's as necessary to test the different modules. The alignment of the VFO was very straightforward, I had added an extra three turns to the VFO torroid and ended up removing a total of five... The remainder of the Sierra was easy to test and align. I have set the power level to two watts. The rig sounds great, VFO is stable, sidetone is ok. First contact on 80m was local, second with a SM (that is not a qrp sado-masochist but a Swedish operator !) I anxiously await the remainder of the band-modules and this will be the rig I will take with me on holiday this summer.

This was by far the easiest kit I have built so far. Why ? Great instruction manual, the best printed circuit boards I have seen ever. All parts were there. The design of the enclosure is very clever.

So: chapeau bas! (hats off) to Wayne and Jim and all of NORCAL who have made this possible.

73, Charlos Potma, PA3CKR
charlos@rivm.nl

From owner-qrp-1@netcom.com Thu Jan 26 18:00:13 1995
Message-Id: <199501262013.MAA13025@netcom16.netcom.com>
Subject: Re: printing in ps ?
Date: Thu, 26 Jan 95 12:13:51 PST
From: "Stan Goldstein, N6ULU" <stan@cruzio.com>

Hi Chuck, thanks for getting the ap notes on the 8044 on the information highway.

How can I print it out from the postscript format ?
I have a laserjet II printer .

--

72.5 (almost a full qrp convert)
Stan Goldstein , N6ULU

From owner-qrp-l@netcom.com Thu Jan 26 21:32:31 1995
Date: Thu, 26 Jan 1995 17:32:02 -0500 (EST)
From: prvalko <prvalko@vela.acs.oakland.edu>
Subject: RESULTS : 1-25 SSB Fox Hunt
Message-Id: <Pine.3.89.9501261718.C3452-0100000@saturn.acs.oakland.edu>

Here are the UNOFFICIAL results from my log. Steve makes final approvals.

Put the kids in the sack at 8:30. My wife is in Boston for a class, I've got the whole night free to QRP away! I grabbed a couple cans of ice-cold Vernors (ginger ale) and headed into the shack.

8:45pm Got a call from Walt, WB8E on the twisted pair. He wanted to hook up on the repeater to scare up some ops.

8:50pm Tuning 40M... sheeze! Who delt THIS mess? wall to wall broadcast right on my freqs! The NERVE! Well here we go...

9pm called CQ for 15 minutes without a single response... Hmm I wonder if I just go to bed will anyone know?

9:15pm Checked into the MI-QRP (Chapter III) FM net on 145.17. Told of the Fox Hunt and lack of contacts.

9:30 Switched to 7.210 section of the band. MUCH quieter! No responses though... studied my Ten Tec 405 (50watt) amp... who'd know? I would, kept it off.

9:44 Bored stiff. Decided to call KB2AR calling CQ and cluttering up the band for 20KHz with his big amp signal. He pulled me out of the noise! I popped on the 405 amp and we chatted for a few minutes. Said I had a nice sig.

9:50 Walt, WB8E about 30 miles away calls me QRO, he's 44 I get a 33

10pm On to 80 meters! Whoaaa. B I G signals, probably power a small

city with the kilowatts centered around 3.790... I snuck into a hole and called CQ

10:03 CONTACT!!! AB4EL Steve was 55, I got a 57. I dunno if Steve gives "real" reports or S-meter reports and forgot to ask.

3:06 KC1FB Jim in Norwalk CT 56 me a 57-58

3:09 N1QPR (man that call is CLOSE to QRP!) gave him a 22 but he disappeared!

3:10 W3PM (W3 Power Mite! excellent call) Huntsville Ala. 57/59

3:16 AB4EL gives some more emotional support

3:17 KG8KZ Dave, abt 20 mile from me. Dave heard me on the MI-QRP net and wanted a Qso. he was QRO but dropped down to 5w with no loss of sig. AB4EL was monitoring and went ballistic when he heard dave was QRO. Dave called later and we even went up to 2M fm after the hunt for a nice QSO. HINT: Don't even THINK of calling the FOX with >QRP power.

3:22 KE4PC mike 22 and 22

3:25 AD4ZT Charlie ion Munosburo(?) KY 55/55 He was QRO at least at first

3:28 AD4ZE (Geez those calls were almost identical!) Warren in NC 55/55 He's on the NET and was QRP

3:34 KG8KZ called me QRP following Steve's advice. 54/55

3:36 KE4PC Called again as I had jumped up to 3.901KHz

about 10 to 11pm, Steve AB4EL called and we called it a night. Great sigs on 80M, 40 was awful.

73 =paul= wb8zjl

From owner-qrp-l@netcom.com Thu Jan 26 02:57:53 1995

Subject: Re: Ten Tec Argo 556

From: brian.carling@acenet.com (Brian Carling)

Message-Id: <2a6.8451.500@acenet.com>

Date: Wed, 25 Jan 1995 18:44:00 -0500

>From: brian.carling@acenet.com

W4RNL (cebik@utkvtx.utk.edu) writes:

CE>Brian,

CE>It would be useful to many netters if you could expand on your evaluation
CE>of the two rigs in question. I am only 30 miles from Sevierville, TN, and
CE>would like a good reason to put my \$ elsewhere. Perhaps others would
CE>benefit from a comparison of properties, features, or whatever. Thanks.

CE>-73-
CE>LB, W4RNL

Actually the comments were a quote from Nils, WB8IJN.
You'll have to ask him. I haven't played with the Ten TEC Argonauts
(Although I would REALLY like to own one!!)

73 de AF4K, Brian

~ SLMR 2.1a ~ They both love eels: that's a Moray!

From owner-qrp-1@netcom.com Thu Jan 26 11:56:44 1995
From: Bob_White@ccmail.aerosys.loral.com
Date: Thu, 26 Jan 95 08:43:39 EST
Message-Id: <9500267911.AA791138619@ccmail.aerosys.loral.com>
Subject: Re: TenTec Scout Current Req's

The Power Out on the TenTec Scout is adj by screwdriver. A hole
located on the bottom of the Scout gives access to the Power adj pot.

You can get the Scout down to about 2 amps at 5 watts by bypassing the
RF final section (which is how they make the Argo 556). TenTec will
send you a QRP Mod sheet for the Scout if you request one. I elected
not to change the Metering section to show full scale at 5 watts as I
sometimes run the Scout from the car QRO. Most times the Scout sits
on my QRP desk with my HW-9...both are fed by a 3 amp RS power supply.
The MOD for the Scout QRO to QRP takes about 5 mins and only a
screwdriver.

73,
Bob White W03B

----- Reply Separator -----
Subject: TenTec Scout Current Req's
Author: miker@cc.com (Mike Robinson) at Internet
Date: 1/24/95 3:56 PM

Received: by ccmail from netcom6.netcom.com
>From owner-qrp-1@netcom.com
X-Envelope-From: owner-qrp-1@netcom.com
Received: by netcom6.netcom.com (8.6.9/Netcom)
id PAA22782; Tue, 24 Jan 1995 15:07:33 -0800
Received: from csn.net by netcom6.netcom.com (8.6.9/Netcom)
id PAA22767; Tue, 24 Jan 1995 15:07:29 -0800
Received: from cc.com (cc.com) by csn.net with SMTP id AA22316
(5.65c/IDA-1.4.4 for <qrp-1@netcom.com>); Tue, 24 Jan 1995 16:08:00 -0700
Received: by cc.com (4.1/SMI-4.1)
id AA20683; Tue, 24 Jan 95 15:56:37 MST
Date: Tue, 24 Jan 95 15:56:37 MST
>From: miker@cc.com (Mike Robinson)
Message-Id: <9501242256.AA20683@cc.com >
To: qrp-1@netcom.com
Subject: TenTec Scout Current Req's
Sender: owner-qrp-1@netcom.com
Precedence: list

Someone post a note that mentioned the Scout using the same amount of power at 50 watts out as at 5 watts out. Since I've been considering getting one, this concerned me.

I have the spec sheet for the Scout 555 in front of me:

Power Required: @ 12-14 VDC; 600ma receive, 10A transmit
@ 50 watts out, 4.5A @ 5 watts out. I feel better.

If I misread the earlier post, please correct me.

The one thing not clear on the spec sheet is how the power out is selected. Can anyone shed light on this?

=====
7.3 de Michael aa0ub All computers, software and harddisks, crash.
miker@cc.com
=====

From owner-qrp-1@netcom.com Thu Jan 26 13:26:50 1995
From: Bob_White@ccmail.aerosys.loral.com
Date: Thu, 26 Jan 95 09:21:49 EST
Message-Id: <9500267911.AA791140909@ccmail.aerosys.loral.com>
Subject: Re: TenTec Scout Current Req's

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From owner-qrp-1@netcom.com Thu Jan 26 14:05:37 1995
From: Bob_White@ccmail.aerosys.loral.com
Date: Thu, 26 Jan 95 09:21:51 EST
Message-Id: <9500267911.AA791140911@ccmail.aerosys.loral.com>
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7.3 de Michael aa0ub All computers, software and harddisks, crash.
miker@cc.com

From owner-qrp-1@netcom.com Thu Jan 26 05:02:48 1995
From: Johnson_Dan@AAC.COM
Message-Id: <9501261016.22618.AC@smrouter.AAC.COM>
Date: Wed, 25 Jan 95 23:48:00 PST
Subject: Velocity factor of 12 gauge wire?

[Think I tried to send this a week or so ago, but local problems may have dusted it. Sri if repeat.]

Antennas are important for QRP work, so I figured this would be The Place to ask this question, especially considering how many people seem to blow the bell curve in these parts.

Do you know the velocity factor (or, alternately, the inductance and capacitance) of 12 gauge wire?

A non-ham (but but otherwise verry sharp) friend of mine has written a

computer program which models a dipole in free space, beginning with Maxwell's equations. He did this as a project for a graduate class but had to guess the velocity factor of the radiator. (Did, doing, this guy won't be happy until the thing runs like greased lightning on a toy computer and is then given a taste of Cray.)

He has been unable to find velocity factors for anything but transmission lines in available amateur literature.

His model assumes that the radiator is a cylinder of copper. Do characteristics of the copper (stranded or not) matter, or is it just proximity to dielectric material. Maybe someone can set me straight and help my friend nudge his model this much closer to real-life.

In the Q&A section of Feb. (Jan?) QST Novice Notes states that the V.F. for wire is 95%. Need confirmation or refutation what characteristics of the copper itself might affect that.

Thank you for supporting our local theoretical scientist.

72+1 es TIA de KC4EWT
Johnson_Dan@aac.com

From owner-qrp-l@netcom.com Thu Jan 26 12:47:42 1995
Message-Id: <9501261554.AA25726@esds01.es.dupont.com>
Date: Thu, 26 Jan 95 10:54:14 EST
From: "Stephen M. Shearer, 695-7719" <shearer@eplram.dnet.dupont.com>
Subject: RE: Velocity factor of 12 gauge wire?

A couple of other factors to take into account too...

1. ratio of free space wavelength to conductor diameter (K) $K_{max} = 0.98$
2. End Effect

As far as velocity "factor" goes, the type of insulation also matters. A few years ago I built the "quagi" antenna for 432 using information in the handbook. The design said to use 12/14 guage house wire (don't remember the guage). They left the insulation on, well... I thought it would look better without the insulation. It did, but the swr was Very High! Not one to give up easy... I found the QST's the handbook was based, well in the second design, there was a note to LEAVE THE INSULATION ON!! so I did --- SWR was low enough, it was hard to measure even with 100W forward power! The difference is the velocity

factor of
the insulation. If I had increased my dimensions (more than I did) it would have
worked. I
have talked to a few who also made the antenna without insulation and had to make
it
larger... At 432 Mhz the effect is more noticeable than using insulated wire for
an 80 meter
dipole... also "K" comes into effect...

73, Steve WB3LGC

From owner-qrp-1@netcom.com Thu Jan 26 19:37:20 1995
From: JEVERHART@cayman.vf.ge.com
Date: Thu, 26 Jan 1995 16:24:56 -0500 (EST)
Message-Id: <950126162456.2240a0d2@cayman.vf.ge.com>
Subject: RE: Velocity factor of 12 gauge wire?

Dan,

I don't have a ready reference but know an area that can be researched to help
your search for velocity factor data. Single wires can be used as transmission
lines if the energy is properly "launched" into (onto?) them. You may try a
search of antenna or transmission line literature for something like
"single-wire transmission lines" or "G line".

While the transmission mechanism is different between usage of wire as an
antenna and usage as a transmission line, I suspect that the velocity factor is
the same.

The 1991 ARRL Antenna book briefly mentions them in Page 18-2 without much
practical data. Their Bibliography on Page 22 has several specific references:

'G. Gobaunu, "Single-Conductor Surface-Wave Transmission Lines," Proc IRE, Vol
39, Jun 1951, pp 619-624; also see Journal of Applied Physics, Vol 21 (1950),
pp 1119-1128'

and...

'G. A. Hatherell, "Putting the G Line to Work," QST, Nov 1974 pp 11-15, 154,
156.'

My "Reference Data For Radio Engineers" (Fifth Edition) is silent on the
matter.

72/73 and Good Luck,

Joe E. N2CX

From owner-qrp-1@netcom.com Thu Jan 26 03:27:54 1995
From: ab4el@cybernetics.net (Stephen Modena)
Message-Id: <9501260612.AA16152@cybernetics.net>
Subject: What is QRP Fox Hunting anyway?
Date: Thu, 26 Jan 1995 01:12:24 -0500 (EST)

"WHAT IS QRP FOX HUNTING ANYWAY?"

Folks! I'm sorry to have to make this posting. It's going to be a little bit (or a lot) of a lecture about "What is the QRP spirit?" It is not directed at anyone personally, but is directed to some of the participants in the SSB QRP FOX HUNT of this week...and *all* future participants.

Be Fore-Warned: This from the ruler-maker and rule-arbiter of the SSB QRP FOX HUNT. Me: Steve AB4EL/QRP.

WHAT IS A QRP QS0?

The FOX is calling: "CQ CQ INTERNET QRP FOX HUNT de AB4EL/QRP"

And a station answers...but he is runnning 100 watts.

Is this a kosher QRP contact for the purposes of the SSB QRP FOX HUNT?

No. No point for the Hunter. No point for the Fox.

The QS0 continues, with the Fox saying: "...I'm running five watts QRP. What is your power? Over, over."

The Hunter says: "Wait a moment...let me turn my power down to 5 watts..." which he proceeds to do.

Was that action all that was needed to make it a QRP QS0?

No. Still no point for the Hunter. No point for the Fox.

Do you see why? The above scenario happened *several* times last night. Unfortunately for the Fox, Paul WB8ZJL, he will score fewer points than otherwise would have been the case.

Paul's signal on 75 M was strong here for the full hour (he is north of Detroit, MI and I am in Raleigh, NC.) He was running 4.5-5 watts and despite some *really* strong nearby signals, he was right in there

and often as loud as S9+20!

So why did some participants give him a call running QRO? 100 watts? If the QRP station sounds loud to me, should I not be sure that my first *several* tries are at QRP power levels?

Do we have to have a "homebrew" radio that *can't* run more than QRP to be a QRPer? Do some of us disdain or discourage QRPing with radios like my Kenwood TS-430-S because they don't want to be disappointed by people who say they are QRPers, but whose *first* impulse is to call QRO...and then cut back to QRP once they have *established* the circuit?

The rules I issued for this "contest" were clear...we are interested *only* in QSOs that were 2-WAY QRP...from the get-go.

My rules cover a related situation: no 3-rd party hints or help in the exchange of callsigns and signal reports (both required for a "completed" QSO). I've participated in WAS nets where relay help is vigorously refused by certain stations...and they get *really* upset when someone goes ahead and relays nonetheless! I would be mad!

My set of rules permits an *indirect* form of help in locating the Fox...and I try to give a boost to each Fox via that rule. I chat with the Fox in multiple QSOs during his operating period. I am running QRP at all times. Someone might hear me easily, but not have noticed the Fox otherwise. (Of course, the Fox might be so strong everywhere that I might as well go to bed. :^)

Contrast this to the station who "buddies up" and for some reason he is *always* running QRO. Would that a fair boost to the Fox? No, not at all.

Well, you may say: Isn't that just the same as the stranger who hears the Fox calling "CQ INET FOX HUNT" and comes back to him with his linear? The answer is: that stranger does *not* know that the *preference* of the Fox is to have a QRP station call him. It's a no-fault contact both ways...in addition to it not counting for points, anyway. Not so the Inetter who *knows* that it is a QRP evening and he *ought* to be running QRP at *all* times unless an *emergency* arises.

After all, if we are QRPers, then we *run* QRP! Right?

At the end of the session last night; Paul WB8ZJL and I were chatting...and the path was fading, I asked: "Have you finished your session? I don't want to go QRO unless you are done."

There is *no* excuse or reason for any knowledgeable participant in the Fox Hunt session to be running QRO. Period.

Can you? Yes. Should you? No.

I called out to the ones who came on to Paul running QRO that the QSO didn't count...and invited them to come back *later* at some random time (in five or ten minutes) and call the Fox again *running* QRP both ways from the get-go.

And to Paul: I hope you will be patient with me...for on more than one point you have been involved in "clarefying" just what goes and what doesn't in this SSB QRP FOX HUNT. I listened to you for the hour on 75 (couldn't hear you on 40 M even in your QSO with KB2AR) and 1) you are a good op, 2) you take this seriously, and 3) you are willing to be a Fox even with limited free personal time. A tip of the hat to you: remember, we have a couple of slots open still and I'd be quite pleased if you'd agree to run as Fox a second time. :^)

And to the QRP-L list, feel free to discuss this philosophical point about What Does It Mean to Be A Fox Hunt QRPer? And if you disagree with my stand on this issue, feel doubly free to post your opinion or flame me heavily in private email. :^) But be prepared for me to defend my position and actions. I'm open to be shown my error(s), but please convert me via a reasoned argument!

--

73/Steve/AB4EL ab4el@Cybernetics.NET in Raleigh, NC 35.81245N, 78.65849W

From owner-qrp-l@netcom.com Thu Jan 26 19:27:32 1995
Date: Thu, 26 Jan 1995 13:10:50 -0800 (PST)
From: Monte Stark <ku7y@sage.dri.edu>
Subject: Re: What is QRP Fox Hunting anyway?
Message-Id: <Pine.SUN.3.90.950126130913.24075A-100000@nimbus>

Steve,

Let me just say, "Well said".

It's sad though that it even needs to be said.

73's, Ron

.....KU7Y.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Sun Valley, Nevada....
.....ARRL.....NorCal #330.....NRA LIFE.....

From owner-qrp-1@netcom.com Thu Jan 26 03:25:25 1995
Date: Thu, 26 Jan 1995 12:56:48 +0700 (GMT)
From: Bruce Strong <hs0zbo@sura1.sut.ac.th>
Subject: Re: Winding toroids
Message-Id: <Pine.ISC.3.90.950126125424.9596C-100000@sura1.sut.ac.th>

On Tue, 24 Jan 1995 PeterWK8S@aol.com wrote:

> Anyone ever work out a rough formula for computing how much wire is needed
> for a given number of turns on a standard toroid? It be much simpler if I
> could figure out how much wire to hack off the spool before I start winding.
> Pushing/pulling too long a length makes more work than necessary. Any ideas
> out there?

>
> PeterWK8S

>
Rough approximation: circumference of a circle times number of turns +
lead lengths.

circumference of a circle = pi (3.14) times diameter.

bruce
hs0zbo

From owner-qrp-1@netcom.com Thu Jan 26 11:40:25 1995
Message-Id: <199501261539.HAA13148@netcom.netcom.com>
Date: Thu, 26 Jan 95 07:52:02 EST
From: C=BAILEY%IS%211EIS@PAMDT.ANG.AF.MIL
Subject: Re: Winding toroids

The is a great chart used by NorCal which came from a previous edition of the
ARCI QRP Quarterly. I'm not sure which issue. de KT3A.